

Notice of Allowability

Application No.

10/626,518

Examiner

Sam Rizk

Applicant(s)

KOSEKI, YUICHI

Art Unit

2112

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 9/26/2007.
2. ☒ The allowed claim(s) is/are 2-27.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

8,21,23

Jacques Louis Jacques
JACQUES LOUIS JACQUES
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

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DETAILED ACTION

- Response to the applicant's amendment dated 19/26/2007
- Claim 1 has been Cancelled
- Amended claims 2-27 have been submitted for examination
- Amended claims 2-27 have been allowed

Drawings Objections

1. In view of the applicant's amended drawings filed on 9/26/2007, all objections to the drawings are withdrawn.

Claim Objections

2. In view of the applicant's amended claim 8, all objections to claim 1 are withdrawn.

Claim Rejections - 35 USC § 112

3. In view of the applicant's remarks and cancelled claim 1, all rejections to the claim 3 under section **35 USC § 112** are withdrawn.

Response to Arguments

4. Applicant's arguments and amended claims 2-27, see pages 17-19, with respect claims 19, 22 and 27 to have been fully considered and are persuasive. Claims 2-7, 9, 19 and 22 Rejections under section **35 USC § 102(b)** of the office action mailed on 6/26/2007 has been withdrawn.

REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance:

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5. In regard to claims 19, 22 and 27, the prior Art of record and, in particular Packer US patent no. 6058453 teaches synchronization sub-code and main data through the "MSF" Minute-Seconds-Frame of a sub-code stream component counter.

However, the prior art do not teach, suggest, or otherwise render obvious the features claims in claims 19, 22, and 27 that disclose performing a predefined synchronization protection on synchronization information included in sub-code to generate a sub-code synchronization signal; writing said sub-code synchronization signal in an empty area of an interleave RAM for storing main data; and managing addresses with a FIFO area in a manner similar to the said main data to cause to said sub-code synchronization signal read from said interleave RAM to function in synchronization with the main data.
6. Claims (2-9) depend from claim 27.
7. Claims 20-21 depend from claim 19.
8. Claim 23 depend from claim 22.
9. Copied below the reasons for allowance of claims 10-18 and 24-26 in the office action mailed on 6/26/2007.

REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance:

10. The prior Art of record and, in particular Packer teaches:

An optical disk playback apparatus for playing back main data and an associated sub-code read from an optical recording medium, said apparatus comprising:

- an interleave RAM for storing the main data; and

- interleave RAM control means for writing a sub-code synchronization signal generated by performing a predefined synchronization protection on synchronization information included in the sub-code into

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an empty area of said interleave RAM to manage addresses with a FIFO area in a manner similar to the main data, causing the sub-code synchronization signal read from said interleave RAM to function as a sub-code synchronization signal synchronized with the main data, However, the prior art do not teach, suggest, or otherwise render obvious the claimed limitation in claim 10:

said interleave RAM control means including means for writing, when said FIFO area included in said interleave RAM is centered in response to an underflow of said FIFO area, "0" data into addresses of a sub-code synchronization signal storage area jumped by said centering.

11. Claim 11 depend from claim 10. 22. Claim 12 is allowed.
An optical disk playback apparatus for playing back main data and an associated sub-code read from an optical recording medium, said apparatus comprising: an Interleave RAM for storing the main data; .
interleave RAM control means for writing a sub-code synchronization signal generated by performing a predefined synchronization protection on synchronization information included in the sub-cod into an empty area of said interleave RAM to manage the address with a FIFO area in a manner similar to the main data, causing the sub-code synchronization signal read from said interleave RAM to function as a sub-code synchronization signal synchronized with the main data, However, the prior art do not teach, suggest, or otherwise render obvious the claimed limitation in claim 12:
synchronization signal masking means for masking the sub-code synchronization signal read from said Interleave RAM for a certain period from an underflow of said FIFO area to a read of addresses of a sub-code synchronization signal storage area jumped by centering of said. FIFO area.

12. Claim 13 depend from claim 12.

13. Claim 14 is allowed.

REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance:

14. The prior art do not teach, suggest, or otherwise render obvious the claimed limitation in claim 14:
double synchronization protecting means for storing the main data in said interleave RAM, and also writing a 1-bit sub-code synchronization

signal generated by performing a predefined first synchronization protection on synchronization information included in the sub-code into an empty area of said interleave RAM, and performing a second synchronization protection different from the first synchronization protection on the sub-code synchronization signal read from said Interleave RAM together with the main data.

- 15. Claim 15 depend from claim 14.
- 16. Claim 16 is allowed.

REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance:

- 17. The prior art do not teach, suggest, or otherwise render obvious the claimed limitation in claim 16:
An optical disk playback apparatus for playing back main data and an associated sub-code read from an optical recording medium, said apparatus comprising:
a flag RAM for storing a flag signal associated with the main data; and flag RAM control means for writing a sub-code synchronization signal generated by performing a predefined synchronization protection on synchronization information included in the sub-code into an empty area of said flag RAM to manage addresses with a FIFO area in a manner similar to the main data, causing the sub-code synchronization signal read from said flag RAM to function in synchronization with the main data.
- 18. Claim 17 depend from claim 16.
- 19. Claim 18 has similar language as per claim 16.
- 20. Claim 24 ahs similar language as per claim 10.
- 21. Claim 25 has similar language as per claim 14.
- 22. Claim 26 depend from claim 25.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sam Rizk whose telephone number is (571) 272-8191. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jacques Louis-Jacques can be reached on (571) 272-6962. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

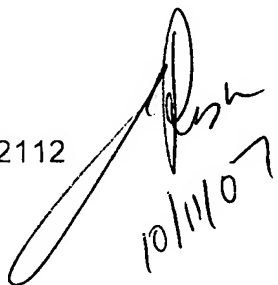
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Should you have questions on access to the Private PAIR system, contact the Electronics Business Center (EBC) at 866-217-9197 (toll-free)

Sam Rizk,

Examiner

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10/11/07



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